# Transition to Independence Process (TIP): System Development & Research Merged Data Analysis (MDA) Project

#### Transition to Adult Roles for Students with EBD:

### A Follow-up Study of Student Exiters from a Transition Program

Arun Karpur, Peter Caproni, Hank Sterner, Duane Whitfield, and Hewitt B. Clark



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#### Abstract

Transition from adolescence to adulthood is composed of various physical, mental, and psychosocial changes. This period is especially challenging for those youth and young adults with emotional/behavioral disturbances (EBD). The Transition to Independence Process (TIP) system is a model intervention, designed to prepare and facilitate youth and young adults with EBD in their transition into adulthood roles through a person-centered, developmentally-appropriate process. The Steps-to-Success program, which is based on the TIP system, serves students with EBD who attend the Robert Morgan Vocational Technical School (a secondary school of the Miami-Dade Public School District).

This present study involved an evaluation of post-secondary outcomes of exiters from the Steps-to-Success program and compared them with outcomes for: 1) other young adults who were previously classified as EBD and who had services as usual; and 2) young adults with no previous classifications in Dade County in the same year. These analyses were conducted using existing state and national datasets. This study highlights the fact that the Steps-to-Success program resulted in statistically significant better post-secondary outcomes for young adults with EBD, in contrast to a comparable group of young adults who had not received specialized transition services in this same geographical area.

## Transition to Adult Roles for Students with EBD: A Follow-up Study of Student Exiters from a Transition Program

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Transition from adolescence to adulthood is marked by the onset of physical changes during puberty and the end is marked by the individuals' acceptance of the responsibilities and privileges of early adulthood in the domains of employment, education, living situation, and personal and community life functioning (Clark, & Davis, 2000; Vander Stoep, Bersford, Weiss, McKnight, Cauce, & Cohen, 2000). In addition to focusing on personal goals and achievements, young people have to meet many general societal expectations. This transition to adulthood is especially challenging for those youth and young adults with emotional/behavioral disturbances (EBD)<sup>1</sup>(Vander Stoep, Davis, & Collins, 2000; Wagner, 1993). Socio-demographic risk factors such as history of abuse in childhood, poverty, and violence in family and neighborhood, and the lack of service coordination among special education, child welfare, children's mental health, adult mental health, and juvenile justice systems further complicate the transition of young people with EBD (Blackorby, & Wagner1996; Clark, Belkin, Obradovich, Casey, Gangon, Caproni, & Deschenes, 2002; Davis, 2001; Davis, & Butler, 2002; Rylance, 1997).

Some transition programs for this population are being developed and evaluated with encouraging findings that indicate specialized services are helpful (Bullis, Morgan, Benz, Todis, & Johnson, 2002; Cheney, Hagner, Malloy, Cormier, & Bernstein, 1998;

Clark, Pschorr, Wells, Curtis, & Tighe, in press; Cook, Solomon, Farrell, & Koziel, 1997). One of the models that has received a great deal of program development and research attention is referred to as the Transition to Independence Process (TIP) system. The TIP system is a model, designed to prepare and facilitate youth and young adults with EBD in their transition into adulthood roles through a person-centered, developmentally-appropriate process. The mission of the TIP system is to assist these young people in achieving their goals in the transition domains of employment, education, living situation, and community life functioning (Clark & Davis, 2000; Clark, Unger, Steward, 1993). The TIP system has been developed, and is continuing to be researched, as it is applied with young people across various service systems, including foster care, juvenile justice, education, homeless/runaway, mental health, and vocational rehabilitation in different communities.

The Steps-to-Success program, which is based on the TIP system, serves students with EBD who attend the Robert Morgan Vocational Technical School (a secondary school of the Miami-Dade Public School District). The Steps-to-Success program involves several major components: 1. community/vocationally oriented academic curriculum and employability training; 2. progressive inclusion of the students into vocational/technical educational courses based on their interest; 3. paid and unpaid practicum work experience for applying employability skills and exploring various work and career options; 4. supports and services tailored to enable students to succeed in the school and work experience endeavors (e.g., tutorial services, co-worker mentors at work sites); and 5. individual and group therapeutic and counseling services (e.g., student and family counseling, group art therapy, social skills development).

The evaluation of treatment programs requires the examination of fidelity and

effectiveness of program strategies. The TIP system continues to be examined through qualitative and quantitative studies to assist in the refinement of the model and ensure its efficacy as it is being applied within different communities (Clark, et al., in press; Deschenes, Sarkis, Caproni, & Clark, 2003). This present study involved an examination of post-secondary outcomes of exiters from the Steps-to-Success program, with these outcome indicators being analyzed from existing state and national datasets. In addition the post-secondary outcomes of Steps-to-Success exiters were compared to outcomes in this same geographic area for other comparable young adults who were previously classified as EBD or who did not have previous disability classifications.

#### Methods

#### **Establishment of the Merged Dataset**

A dataset consisting of information on previous programmatic exposure, for 43 exiters (now age 18-22 yrs.) with at least one year of prior exposure to the Steps-to-Success program was obtained from the program records. This file was match merged with Florida Education & Training Placement Information Program (FETPIP) and National Student Clearing House (NSCH) files for the fourth quarter of the year 2000, which contained status information on employment, continuing experience in post-secondary education, and involvement with department of corrections, for these student exiters from Steps-to-Success program. This formed the merged dataset for the first part of this follow-up study.

Another merged dataset was created that consisted of data files obtained from:

1) the Florida Department of Education (FL DOE) for all students in the state (excluding those in Steps-to-Success program) with valid Social Security Numbers (who were between the ages of 11 and 20 on June 30, 1998) in the school year 1997-98; and 2) the matching FETPIP & NSCH datasets for the fourth quarter of the year 2000. The young adult exiters from Steps-to-Success program were excluded from these datasets. The FL DOE file included demographic information and disability classifications where as FETPIP and NSCH files contained status information on post-secondary outcomes (e.g., employment, continuing experience in post-secondary education, and involvement with department of corrections). A frequency matched subset data file (matched for ethnicity and gender with the Steps-to-Success merged dataset) consisting of young people classified with EBD and those with no disability classification was created from

the second merged dataset. This merged dataset was used in the second part of this follow-up study.

Merging of all the datasets was carried out in Statistical Analysis Solutions (SAS Inc., Cary, NC) software, using the SSN as a matching variable.

### **Data Security**

Electronic datasets were transferred through secure means from state agencies as defined by agreements with each agency. These datasets were stored on a secure remote server at FMHI/USF. Access to this server was restricted and only those authorized individuals involved in the data analysis could examine these datasets. The entire data storage and data analysis system was firewall protected under Health Insurance Portability & Accountability Act (HIPAA) standards. Additionally, after merging, unique identifiers (e.g., SSN, name) were deleted from the merged datasets. All aggregate level analyses of grouped data are presented in this report.

#### Follow-up Study on the Steps-to-Success Program

The Steps-to-Success program began in 1997, and 68 students had exited the program from 1997 through 2002. Of these 68 young people, 43 exited the Steps-to-Success program with at least one academic year of exposure to the program. Several types of post-secondary outcomes were examined for these young adults (ages 18-22 years) who exited the Steps-to-Success program and were contrasted with outcomes for two comparison groups in Dade County. The post-secondary outcomes studied were employment (Florida only) including military/federal agency employment, incarceration (Florida only), and post-secondary education and training. The three comparison groups were: 1) students with EBD classifications who were enrolled in the Miami/Dade schools in the 1997 school year; 2) student exiters who attended at least

one academic year in the Steps-to-Success program; and 3) typical students, i.e., non-ESE students for that 1997 cohort. Students with the classification of "gifted" were excluded from the analyses. Young people who were 18 years of age or above as of June 30, 2001 (two years from the date on which the cohorts were established) were retained in the final dataset, and the rest were excluded from the present analyses.

#### **Description of Population**

Table 1 provides the comparison of percentage of young adults with EBD in Dade County, exiters from the Steps-to-Success program and Typical in Dade County across the various demographic characteristics prior to matching.

Table 1. Comparison of percentage of students in each group (EBD in Dade County, Steps-to-Success exiters and Typical in Dade county) across various demographic variables before matching.

Demographic Characteristics	EBD in Dade County (N = 990)	Steps-to-Success Exiters (N = 43)	Typical in Dade county (N= 61,285)
Gender			
Females	25.2	34.9	49.9
Males	74.8	65.1	50.1
Age Groups			
18	37.8	36.4	28.7
19	31.3	13.6	29.3
20	20.2	22.7	23.5
21	8.1	13.6	11.3
22	2.6	13.6	7.3
Ethnicity			
Caucasians	16.9	39.5	12.9
African Americans	42.9	16.3	32.1
Hispanics	39.9	44.2	53.5
Other ethnic groups	0.3	0	1.5

#### Follow-up Study: Part I

The first series of analyses were on the 43 young people who had exited from the Steps-to-Success program to examine the association between some of their experiences and their post-secondary outcome indicators. The young adults' previous experience variables included: a) drop out from high school vs graduated or received a GED certificate; b) exposure to paid or unpaid employment experience vs. not having been exposed to such; and c) having been involved with the Department of Juvenile Justice or Foster Care. These experience variables for the exiters were obtained from school and program records.

Figures 1, 2, and 3 present the percentage of exiters from the Steps-to-Success program for each of the post-secondary outcome indicators, across various experience variables. Figure 1 illustrates that young adults who graduated had higher percentages of individuals who were employed, continuing post-secondary education, and being productively engaged<sup>2</sup>, compared to those who dropped out of high school. Note that the percentage of young adults who were incarcerated or on controlled release is higher among those who dropped out (13%) compared to those who graduated (0%).

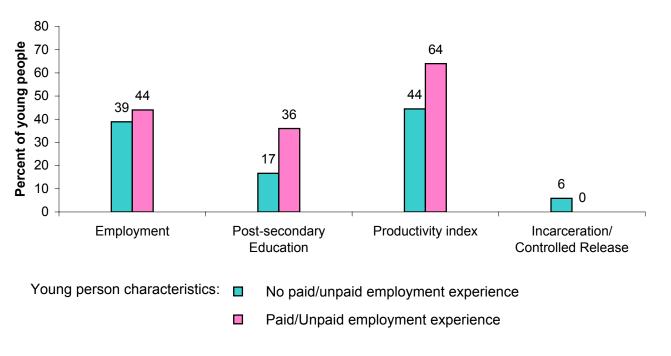
Figure 2 also reveals patterns that are in the predicted direction, i.e., young people with paid/unpaid employment experience were more likely to have positive post-secondary outcomes compared to those who did not have any such experience. As is evident in Fig.3, young people who had not been involved in the DJJ or Foster Care system were more likely to be enrolled in post-secondary education, productively engaged, and not incarcerated or on controlled release. Although not statistically significant, the proportion of young adults employed does not follow the predicted pattern.

A comparison among those who graduated and those who dropped out of secondary school 80 Percent of young people 70 62 60 50 44 35 40 33 30 20 13 10 0 0 0 **Employment** Post-secondary Productivity index Incarceration/ Education Controlled Release Drop out of high school Young person characteristics: Graduated/GED

Fig. 1: Percentage of Steps-to-Success program exiters across the post-secondary outcome indicators:

Fig. 2: Percentage of Steps-to-Success program exiters across the post-secondary outcome indicators:

A comparison among young people who had exposure to paid or unpaid employment experience and those who did not have any such experience



Involved with DJJ/Foster Care
No involvement DJJ/Foster Care

### Follow-up Study: Part II

Second part of this study involved analyses of the post-secondary outcome indicators across three groups of young people who had been students in Dade County. The groups were: a) young persons with EBD in Dade county; b) young persons with EBD who exited the Steps-to-Success program; and c) young persons with no ESE classification, referred to as Typical in this presentation. It can be noted from Table 1 that the proportion of young adults differed across the demographic variables in these classification groupings. Differences have been noted in post-secondary outcomes for various disability classifications across gender and ethnicity in some of the previous transition studies (Blackorby, & Wagner, 1996; Wagner, 1992). Therefore, it was decided to frequency match the comparison groups (i.e., young persons with EBD in

Dade county and young persons with no disability classification in Dade county) by ethnicity and gender, with the Steps-to-Success exiters. A new comparison data file was created by randomly selecting young adults from the EBD and Typical groups – four were selected randomly to match by gender and ethnicity for every Steps-to-Success exiter. This type of matching, controls for the possible confounding induced by variations in proportion of young adults across ethnicity, and gender in the analysis.

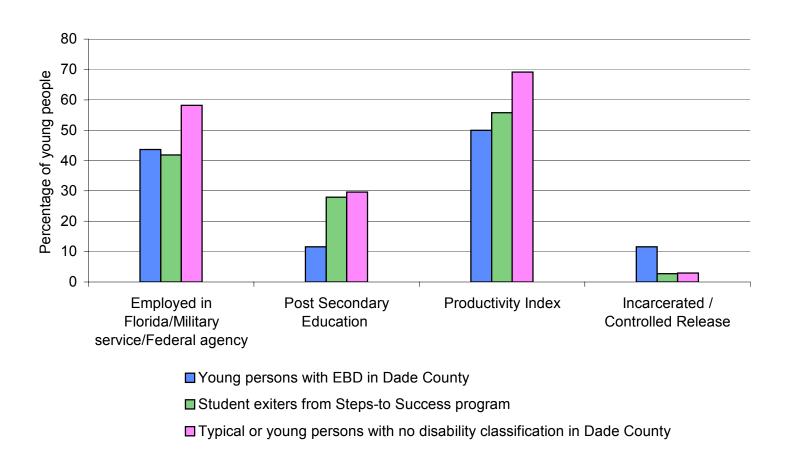
As can be seen in the first set of three bars in Fig. 4, there was a little difference in the proportion of young adults with EBD and Steps-to-Success exiters on percent employed, and the slight difference was not statistically significant. Note that both of these groups were exceeded by the proportion of Typical young adults employed.

The post-secondary education involvement by the exiters approached the norm reference set by the Typical young adults, and was statistically significantly higher than that of the EBD matched comparison group (p-value <0.0001). The odds ratios also indicated that the young adults exiters were 3 times more likely to continue post-secondary education compared to the comparison group of young people with EBD in Dade County (OR = 2.9; 95%CI: 1.3 to 6.6). Also the Steps-to-Success exiters were only 1.1 times less likely than the Typical to continue post-secondary education (OR = 1.1; 95% CI: 0.5 to 2.3), where as the EBD group was 3.2 times less likely to continue post-secondary education compared to Typical (OR = 3.2; 95% CI: 1.8 to 5.7). The productivity index shows a slightly higher percentage of Steps-to-Success exiters being productively engaged (employed and/or in post-secondary education) than that of the EBD comparison group, but this difference is not statistically significant.

Regarding incarceration/controlled release, the Steps-to-Success exiters were almost identical to the Typical outcome level, where as the EBD comparison group

yielded a much higher proportion being incarcerated than that of the exiter group (p-value<0.0001). The odds ratio illustrated this further in that the exiters from the Steps-to-Success program were as likely to be incarcerated or on control release as Typical (OR = 0.8; 95% CI: 0.1 to 7.0), where as young adults in the EBD group in Dade County were 4.4 times more likely to be incarcerated compared to Typical (OR = 4.4; 95% CI: 1.6 to 12.0).

Figure 4: Comparison of percentage of young people for three groups across post-secondary outcome indicators.



#### **Discussion**

This study highlights the fact that the Steps-to-Success program resulted in improved post-secondary outcomes for young people with EBD in Dade County. The improved outcomes were evident across all measures, with most of the differences being statistically significant. Additionally, the comparison of odds ratios among young adults who exited the Steps-to-Success program vs. Typical, and young individuals with EBD in Dade county vs. Typical, shows that the Steps-to-Success exiters were better approaching the outcome levels observed for the Typical group of young adults who had not been classified. Although the findings regarding the Steps-to-Success group are not as high as the Typical group, the exiters' outcomes are quite impressive, particularly in light of the following two facts. First, the Steps-to-Success program's fidelity has been shown to be improving, but it has not met all of the TIP system implementation goals (e.g., service coordination was shown to improve from 1999 to 2001, but Transition Facilitators need to be hired to meet the fidelity goals of TIP [Deschenes, et al., 2003 October]). Second, it has been shown that many of the emotional/behavioral disturbances persist from childhood into adulthood (Greenbaum, Foster-Johnson, Petrila, 1996; Vander Stoep, et al., 2000), such that even though young people may have access to specialized services, they continue to function more on a "recovery" mode than fully "healed."

The emphasis within this study is on the relative differences between the three groups' post-secondary outcomes, rather than the absolute percentages. It was interesting to note that the Steps-to-Success exiters were substantially more likely than their EBD counter parts to be in post-secondary training or education. This may set the occasion for them to secure career-type employment that provides livable-wages and

opportunity for advancement. However, it is surprising that the percentage of the exiters employed is essentially identical to that of the EBD comparison group.

The findings that transition services can be helpful in facilitating transition into adulthood is supported by some additional studies (Bullis, et al., 2002; Cheney, et al., 1998; Clark, et al., in press; Clark, et al., 2002; Cook, et al., 1997). This current study provides a comparison of the exiters from a specialized TIP type system to the post-secondary outcomes of other young adults with EBD and Typical young adults – both groups having exited with "services as usual" within the same geographic area.

The MDA method illustrates an evaluation strategy for estimating the relative post-secondary outcomes from exiters from transition programs against the outcomes from other relevant matched comparison groups from the same geographic area. These types of data can provide stakeholders with local "standards" against which to compare outcomes, and data that may be helpful in continuing to improve the effectiveness of their transition program. Some of the limitations of the MDA method are: a) accessing complete data bases is usually delayed by 6 to 12 months following the reporting year; b) ensuring security and interagency agreements regarding the use of these datasets are essential; c) requires relatively large numbers of individuals in each group to provide for accurate estimates, particularly if analyses by other variables such as gender, ethnicity, and age are being proposed; d) young people in the different groups may not be comparable on all of the relevant dimensions in that the comparison groups are not selected randomly; and e) findings probably do not represent absolute percentages rather the findings are shown relative to appropriate matched comparison groups. Future research will sample post-secondary outcomes more frequently and will track the groups over a longer period of time as they transition through their young adult lives.

The findings from this MDA study on the post-secondary outcomes for young people who have exited a TIP type program are encouraging and supportive of other studies regarding the TIP system (Clark et al., in press; Clark, et al., 2002). More information and documents regarding program and research aspects of the TIP system are available through the TIP website <a href="http://tip.fmhi.usf.edu">http://tip.fmhi.usf.edu</a>.

### References

- Blackorby, J., & Wagner, M. (1996). Longitudinal post-school outcomes for youth with disabilities: Findings from the National Longitudinal Transition Study. *Exceptional Children*, *62*(5), 399-413.
- Bullis, M., Morgan, T., benz, M., Todis, B., & Johnson, M.D. (2002). Description and evaluation of the ARIES Project: Achieving rehabilitation, individualized education, and employment success for adolescents with emotional disturbance.

  Career Development for Exceptional Individuals, 25, 41-58.
- Cheney, D., Hagner, D., Malloy, J., Cormier, G., & Bernstein, S. (1998). Transition services for youth and young adults with emotional disturbance: Description of initial results of Project RENEW. *Career Development for Exceptional Individuals*, 21, 17-32.
- Clark, H. B., & Davis, M. (2000). *Transition of youth and young adults with emotional or behavioral difficulties into adulthood: Handbook for practitioners, educators, parents, and administrators*. Baltimore, MD: Paul H. Brooks, Company.
- Clark, H. B., Belkin, M.T., Obradovich, L.D., Casey, R.E., Gangon, R., Caproni, P., & Deschenes, N. (2002). Transition from school to community: Navigating rough waters. In F.M. Gresham, Lane, K.L., & O'Shaughnessy, T. (Ed.), *Interventions for Children With or At Risk for Emotional and Behavioral Disorders* (pp. 219-316). Boston: Allyn & Bacon.
- Clark, H. B., Pschorr, O. Wells, P., Curtis, M., & Tighe, T. (in press). Transition into community roles for young people with emotional/behavioral difficulties:

  Collaborative systems and program outcomes. In D. Cheney (Ed.), *Transition issues and strategies for youth and young adults with emotional and/or*

- behavioral difficulties to facilitate movement in to community life.: Council for Exceptional Children.
- Clark, H. B., Unger, K., Steward, E. (1993). transition of youth and young adults with emotional/behavioral disorders into employment, education and independent living. *Community Alternatives International Journal of Family Care*, *5*, 21-46.
- Cook, J. A., Solomon, M.L., Farrell, D., & Koziel, M. (1997). Vocational initiatives for transition-age youths with severe mental illness. In S.W. Henggeler, Santos, A.B. (Ed.), *Innovative approaches for difficult-to-treat populations* (pp. 139-163).
   Washington, DC, USA: American Psychiatric press, Inc.
- Davis, M. (2001). *Transition Supports To Help Adolescents in Mental Health Services*.

  Alexandria, VA: National Association of State Mental Health Program Directors.
- Davis, M., & Butler, M. (2002). Service System Supports During the Transition from Adolescence to Adulthood: Parent Perspectives. Alexandria, VA: National Association of State Mental Health Program Directors.
- Deschenes, N., Sarkis, M., Caproni, P., & Clark, H.B. (2003 October). *Case study: A distinctive tool in measuring transition practice*. Paper presented at the International Conference on Career Development and Transition Council for Exceptional Children, Roanoke, VA.
- Greenbaum, P. E., Foster-Johnson, L., Petrila, A. (1996). Co-occurring addictive and mental disorders among adolescents: Prevalence Research and Future

  Directions. *American Journal of Orthopsychiatry*, 66(1), 52-60.
- Rylance, B. J. (1997). Predictors of high school graduation or dropping out for youth with severe emotional disturbance. *Behavioral Disorders*, *23*, 5-17.

- Vander Stoep, A., Bersford, S., Weiss, N.S., McKnight, B., Cauce, A.M., & Cohen, P. (2000). Community-based study of the transition to adulthood for adolescents with psychiatric disorder. *American Journal of Epidemiology, 152*, 353-362.
- Vander Stoep, A., Davis, M., & Collins, D. (2000). Transition: A time of developmental and institutional clashes. In H.B.Clark & M. Davis (Ed.), *Transition of youth and young adults with emotional or behavioral difficulties into adulthood: Handbook for practitioners, educators, parents, and administrators*. Baltimore, MD: Paul H. Brooks, Company.
- Wagner, M. (1992). What happens next? Trends in post-secondary outcomes of youth with disabilities. Menlo Park, CA: SRI International.
- Wagner, M. (1993). *Dropouts with disabilities; What do we know? What can we do?*Menlo Park, CA: SRI International.

- 1. The term emotional/behavioral disturbance (EBD) is used to encompass a variety of diagnoses and classifications that are applied differently in different child- and adult-serving systems and states [e.g., severe emotional disturbance (SED), childhood chronic depression, emotionally-handicapped (EH), severely mentally ill.
- 2. Young people who were employed and/or in post-secondary education were defined as being 'productively engaged'.

<sup>&</sup>lt;sup>1</sup> End Notes: